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10/069,234

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02/23229

1417

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07/18/2007

EXAMINER

NGUYEN, NGA B

ART UNIT

PAPER NUMBER

3692

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/069,234

Applicant(s)

KONOPNICKI ET AL.

Examiner

Nga B. Nguyen

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This Office Action is the answer to the communication filed on February 22, 2002, which paper has been placed of record in the file.
2. Claims 1-42 are pending in this application.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Ferstenberg et al. (hereinafter Ferstenberg), U.S. Patent No. 6,968,318.

Regarding to claim 1, Ferstenberg discloses a method for at least semi-automatically negotiating a relationship between at least a first party and a second party, the steps of the method being performed by a data processor, the method comprising the steps of:

(a) providing a first intention for the first party and a second intention for the second party, each of said first intention and said second intention featuring a plurality of components (column 14, lines 5-15 and column 17, line 50-column 18, line 45, the participants instruct their e-agents to submit to the electronic intermediary 3 the opening

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messages and counter-offer messages indicating all commodities and the maximum amounts that the e-agents intends to buy or sell);

(b) exchanging at least one dispatch between the first party and the second party, said at least one dispatch including a reference to a value for at least one of said plurality of components (column 14, lines 25-30, the electronic intermediary 3 conducts electronic negotiations individually with e-agents 1 in order to arrive at a successful intermediated exchange of commodities, the negotiation is facilitated by the exchange of electronic messages 2, transmitted between the e-agents 1 and the intermediary 3);

(c) altering at least one of said first intention for the first party and said second intention for the second party according to said reference to said value in said at least one dispatch (column 18, lines 45-65, the intermediary 3 generates initial offer messages listing commodities offered and sends then to the e-agents, the intermediary's initial offer for each commodity allocates the total quantity offered by all the e-agents among all the e-agents interested in buying or selling);

(d) comparing said first intention to said second intention (column 58, lines 5-10, the allocation function receives from the e-agents their counter-offer amounts selected from the preceding offer amounts, test 159 performs if all the counter-offer equal the preceding offer among, terminates the intermediated exchange; if any counter-offer amount does not equal its preceding offer amount, then the allocation function computes new offers for all the clients); and

(e) if said first intention matches said second intention, determining the relationship according to said first intention and said second intention (column 19, lines

45-55, upon termination, the participants actually exchange the agreed upon amounts of the commodities).

Regarding to claim 2, Ferstenberg further discloses wherein said reference to said value is selected from the group consisting of a variable component, an actual value, a request for a value from said second party, and a request to select a value from a set of values for said second party (column 18, lines 1-10 and 55-65).

Regarding to claim 3, Ferstenberg further discloses wherein said reference to said value is determined by a compiled goal program and negotiation parameters of said first or said second intentions (column 18, lines 1-10).

Regarding to claim 4, Ferstenberg further discloses wherein said compiled goal program is used to create at least one procedure selected from the group consisting of:

- (i) suggest a tuple of values (column 18, lines 55-65);
- (ii) choose from a number of alternative tuples of values;
- (iii) rank tuples of values according to a desirability; and
- (iv) suggest an improvement to an input tuple of values;

Regarding to claim 5, Ferstenberg further discloses wherein said step of negotiating said relationship between said at least said first party and said second party is effected by, at least in part, using a structure selected from the group consisting of one-to-one with or without revealing and one-to-many without revealing (column 31, lines 30-35).

Regarding to claim 6, Ferstenberg further discloses wherein at least two goal programs are combined to form a combined goal program, which encodes said

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constraints, said preferences and said negotiation parameters of at least said first or said second intentions (column 33, line 20-column 39, line 55, the utility function for solving the constraints).

Regarding to claims 7-8, Ferstenberg further discloses wherein said variable component is associated with a predefined default interval, wherein said default interval is associated with at least one value, at least one range of values or a combination of at least one value and at least one range of values (column 36, lines 1-15, the threshold variables are by default 1 in the equation 33).

Regarding to claim 9, Ferstenberg further discloses wherein step (c) is performed by merging at least a portion of said first intention and at least a portion of said second intention to form a merged intention, such that the relationship is defined according to said merged intention (column 18, lines 45-65, the intermediary 3 generates initial offer messages listing commodities offered and sends then to the e-agents, the intermediary's initial offer for each commodity allocates the total quantity offered by all the e-agents among all the e-agents interested in buying or selling).

Regarding to claim 10, Ferstenberg further discloses wherein only a portion of said first intention and only a portion of said second intention are merged to form the relationship (column 18, lines 45-65).

Regarding to claim 11, Ferstenberg further discloses wherein an entirety of said first intention and an entirety of said second intention are merged to form the relationship (column 35, lines 10-25).

Regarding to claim 12, Ferstenberg further discloses wherein said first intention

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and said second intention are incomplete, such that step (b) further comprises the steps of:

(i) defining at least one computational device for adding at least one suggested component to at least one intention (column 32, lines 5-20, the intermediary 3 resolves the conflict of the amounts of each commodity offered from the e-agents);

(ii) executing said at least one computational device to obtain said suggested component (column 16, line 62-column 17, line 10, the Intermediary computer 10); and

(iii) sending a message from the first party to the second party, said message including a suggested component according to said at least one computational device. (column 18, lines 45-65, the intermediary 3 generates the initial offer messages and sends them the e-agents, the initial offer is an adjusted offer based on the opening offers sent from the e-agents)

Regarding to claim 13, Ferstenberg further discloses wherein said dispatch of step (b) also includes said first intention of said first party and is sent from said first party to said second party, such that said second party adds said suggested component to said merged intention (column 19, lines 17-25, each e-agent evaluates its current offer from the intermediary, either an initial offer or an offer during a subsequent round of electronic negotiation, and responds with a counter-offer).

Regarding to claim 14, Ferstenberg further discloses wherein step (b) further comprises the step of:

(iv) determining by said second party whether to accept said suggested component (column 19, lines 47-50, the negotiation successfully terminates if all the e-

agents signal that they are satisfied with their last offers).

Regarding to claim 15, Ferstenberg further discloses wherein step (b) further comprises the step of:

(iv) providing a value for said suggested component by said second party (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function).

Regarding to claim 16, Ferstenberg further discloses wherein said first intention and said second intention are incomplete, such that step (b) further comprises the steps of:

(i) defining at least one computational device at the second party for adding at least one suggested component to at least one intention (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function);

(ii) executing said at least one computational device to obtain said suggested component (column 16, lines 32-50, participant computer 47 or 49); and

(iii) sending a message from the second party to the first party, said message including a suggested component according to said at least one computational device (column 19, lines 17-21, each e-agent evaluates its current offer from the intermediary and responds with a counter-offer).

Regarding to claim 17, Ferstenberg further discloses wherein step (b) further comprises the step of:



(i) providing a value for at least one component by said second party (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function)

Regarding to claim 18, Ferstenberg further discloses wherein said component also includes a constraint for restricting said value (column 36, lines 35-40, e.g., the upper and lower constraints).

Regarding to claim 19, Ferstenberg further discloses wherein said constraint determines that said value is not alterable (column 32, lines 45-50).

Regarding to claim 20, Ferstenberg further discloses wherein said constraint determines that said value is alterable, such that step (b) further comprises the step of sending a return message with a counter offer for altering said value of said at least one variable by at least one of the first party and the second party (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function).

Regarding to claim 21, Ferstenberg further discloses wherein step (c) further comprises the step of removing at least one constraint from at least one component (column 38, lines 57-60, ignoring integer constraints).

Regarding to claim 22, Ferstenberg further discloses wherein step (c) further comprises the step of saving a state of each of said first intention and said second intention to form a previous state, before altering said first intention and said second intention, the method further comprising the step of:

(f) if said first intention does not match said second intention, returning said first

intention and said second intention to said previous state (column 19, lines 55-65, if the negotiation did not terminate then the intermediary generates new offers by a process similar to that for generating initial offers, the intermediary generates offers that depend on previous offers and counter-offers).

Regarding to claim 23, Ferstenberg further discloses the method further comprising the step of: if said first intention matches said second intention, notifying each party of acceptance of the relationship (column 45, lines 20-30, the trading workstation clients are informed of the results).

Regarding to claim 24, Ferstenberg further discloses wherein said first intention and said second intention are each constructed as a first intention tree and a second intention tree, respectively, such that step (d) is performed by comparing said first tree to said second tree (column 39, lines 1-55).

Regarding to claim 25, Ferstenberg further discloses wherein step (c) is performed by merging at least a portion of said first tree and at least a portion of said second tree to form a merged tree, such that the relationship is defined according to said merged tree (column 39, lines 1-55).

Regarding to claim 26, Ferstenberg further discloses wherein only a portion of said first tree and only a portion of said second tree are merged to form the relationship (column 39, lines 1-55).

Regarding to claim 27, Ferstenberg further discloses wherein an entirety of said first tree and an entirety of said second tree are merged to form the relationship (column 39, lines 1-55).

Regarding to claim 28, Ferstenberg further discloses wherein each component is constructed from a set of shared classes for the first party and the second party (column 32, line 30-column 33, line 20).

Regarding to claim 29, Ferstenberg further discloses wherein the relationship is determined as a contract, said contract featuring a plurality of intentions, such that steps (a)-(e) are performed for each of said plurality of intentions (column 53, lines 25-65).

Regarding to claim 30, Ferstenberg discloses a system for at least semi-automatically negotiating a relationship, the system comprising:

(a) a plurality of party modules, including at least a first party module and a second party module, each party module featuring an intention for determining the relationship, said intention featuring a plurality of components to be determined for the relationship, such that a process of negotiation matches said intention of said first party module to said intention of said second party module (figure 4 and column 16, lines 32-50, participant computers 47 and 49); and

(b) a central server for at least initially connecting at least said first party module to at least said second party module for performing negotiations (figure 4 and column 16, lines 60-67, Intermediary computer 40).

Regarding to claim 31, Ferstenberg further discloses wherein at least said first party module features a plurality of intentions for negotiating with a plurality of parties (column 16, lines 32-50, e-agent processes).

Regarding to claim 32, Ferstenberg further discloses wherein said central server further comprises a server party module for performing said negotiations on behalf of at

least one party (column 14, lines 30-40, the electronic intermediary 3).

Regarding to claim 33, Ferstenberg further discloses wherein only said server party module performs said negotiations on behalf of a plurality of parties (column 14, lines 30-40, the e-agents communicate only with the intermediary 3 and not with each other).

Regarding to claim 34, Ferstenberg further discloses wherein said central server further comprises a server party module for performing said negotiations on behalf of said central server as a broker (column 14, lines 30-40, the electronic intermediary 3).

Regarding to claim 35, Ferstenberg further discloses wherein said party modules perform said negotiations and said central server only initially connects said first party module to said second party module (column 14, lines 30-40, the e-agents communicate only with the intermediary 3 and not with each other).

Regarding to claim 36, Ferstenberg further discloses wherein at least one party module features at least one computational device for generating a suggested alteration to said intention according to at least one rule, such that if said first intention does not match said second intention, said suggested alteration is generated by said at least one computational device (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function).

Regarding to claim 37, Ferstenberg further discloses wherein at least one party module further features at least one computational device for determining if said suggested alteration is accepted (column 16, lines 32-50, participant computer 47 or 49).

Regarding to claim 38, Ferstenberg discloses a method for at least semi-automatically negotiating a relationship between at least a first party and a second party, the steps of the method being performed by a data processor, the method comprising the steps of:

(a) providing a first intention for the first party and a second intention for the second party, each of said first intention and said second intention featuring a plurality of components (column 14, lines 5-15 and column 17, line 50-column 18, line 45, the participants instruct their e-agents to submit to the electronic intermediary 3 the opening messages and counter-offer messages indicating all commodities and the maximum amounts that the e-agents intends to buy or sell);

(b) providing at least one computational device for defining an additional component for at least one of the first and second parties (column 21, lines 40-50, e-agent process evaluates its offer and determines a counter-offer, substantially optimum according to its utility function);

(c) comparing said first intention to said second intention (column 58, lines 5-10, the allocation function receives from the e-agents their counter-offer amounts selected from the preceding offer amounts, test 159 performs if all the counter-offer equal the preceding offer among, terminates the intermediated exchange; if any counter-offer amount does not equal its preceding offer amount, then the allocation function computes new offers for all the clients);

(d) if said first intention is different than said second intention, defining said additional component by said at least one computational device of the first party

(column 58, lines 5-10, the allocation function receives from the e-agents their counter-offer amounts selected from the preceding offer amounts, test 159 if any counter-offer amount does not equal its preceding offer amount, then the allocation function computes new offers for all the clients).

(e) sending at least one message from the first party to the second party, said at least one message including said additional component (column 18, lines 45-65, the intermediary 3 generates the initial offer messages and sends them the e-agents, the initial offer is an adjusted offer based on the opening offers sent from the e-agents);

(f) determining if said additional component is accepted by the second party (column 19, lines 47-50, the negotiation successfully terminates if all the e-agents signal that they are satisfied with their last offers);

(g) if said additional component is accepted by the second party, adding said additional component to said first intention for the first party and to said second intention for the second party (column 19, lines 17-21, each e-agent evaluates its current offer from the intermediary and responds with a counter-offer);

(h) repeating step (c) at least once (column 17, lines 50-65); and

(i) if said first intention matches said second intention, determining the relationship according to said first intention and said second intention (column 19, lines 45-55, upon termination, the participants actually exchange the agreed upon amounts of the commodities).

Regarding to claim 39, Ferstenberg further discloses wherein steps (d) to (i) are repeated at least once (column 17, lines 50-65).

Regarding to claim 40, Ferstenberg discloses use in a system for at least semi-automatically negotiating a relationship between a first party and a second party, each of the first party and the second party having a first intention and a second intention, respectively, such that the relationship is negotiated by matching the first intention and the second intention, a device operated by at least one of the first party and the second party, the device comprising:

(a) an intention data structure for holding an intention (column 50, line 60-column 51, line 10, the local data area function 113 for storing and retrieving most shared data used by the intermediary 3);

(b) a negotiation control program for controlling a process of negotiation (column 50, lines 47-50, the intermediary process 3 includes three principal functions: allocation function 114, local data are function 113, and communications interface function 112);  
and

(c) a unifier for unifying said intention data structure of a party with said intention data structure of another party to form the relationship (column 50, lines 50-60 and column 51, lines 25-45, the allocation function 114 performs the actual computations necessary to generate offers to e-agents).

Regarding to claim 41, Ferstenberg further discloses wherein said intention data structure includes at least one constraint, the device further comprising:(d) a constraint solver for solving said at least one constraint (column 31, line 40-column 33, line 15).

Regarding to claim 42, Ferstenberg discloses method of creating a minimizing goal for a level within a goal program, the method comprising the steps of:

- (a) identifying constraints within said level (column 31, line 40-column 33, line 15);
- (b) normalizing each of said constraints so as to obtain normalized constraints (column 32, line 30-column 34, line 15, the constraints are presented using the variables in the Table 5); and
- (c) combining said normalized constraints (column 33, line 20-column 39, line 55, using the utility function to solve the constraints).

### ***Conclusion***

- 5. Claims 1-42 are rejected.
- 6. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure:

Kennedy et al. (US 6,055,519) disclose a computer implemented system and process are provided for negotiation and tracking of sale of goods.

Bigus et al. (US 6,401,080) disclose an intelligent agent and method of negotiating herewith incorporate a number of features, used alone or in combination, to enhance the productivity, security, efficiency and responsiveness of the agent in negotiations with other parties.

Tavor et al. (US 6,553,347) disclose a method for conducting "one to one" commercial negotiations through an electronic medium such as the Internet.

Solomon (US 6,035,288) discloses an interactive computer-implemented system and method for negotiating sale of goods and/or services.



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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (571) 272-6796. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3600.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

C/o Technology Center 3600

Washington, DC 20231

Or faxed to:

(571) 273-8300 (for formal communication intended for entry),

or

(571) 273-0325 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Knox building, 501 Dulany Street, Alexandria, VA, First Floor (Receptionist).

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A handwritten signature in cursive script, appearing to read 'Nga Nguyen', written in black ink.

NGA NGUYEN  
PRIMARY EXAMINER

June 4, 2007